

**RCRA Compliance Evaluation Inspection**

**Albemarle Corporation**

2 Adams Avenue  
Tyrone Industrial Park  
Tyrone, PA 16686

Blair County

**RCRA Identification Number: PAD030069140**

SIC Code 2869:

**Date of Inspection: June 27 & 28, 2006**

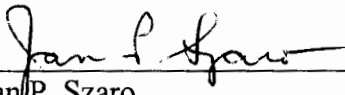
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## **1.0 Introduction**

On June 27 & 28, 2006, the United States Environmental Protection Agency, Region III (EPA), Waste and Chemicals Management Division, RCRA Compliance and Enforcement Branch (RCEB) conducted an unannounced Compliance Evaluation Inspection (CEI) under the Resource Conservation and Recovery Act (RCRA), as amended, 42 U.S.C. Sections 6901 et seq. of Albemarle Corporation in Tyrone, PA. USEPA representative Jan Szaro was accompanied by Pennsylvania Department of Environmental Protection (PADEP) representatives Michael Union and Jeff Meitrott on the inspection. The facility was represented by James Burkey, Environmental Engineer and Ivan Riggle, Site Compliance Manager.

The inspectors arrived at the facility at 9:00 AM on June 27<sup>th</sup> and announced their presence at the Guard House. The inspectors presented their credentials to the guard who summoned James Burkey, Environmental Engineer, to the Guard House. The inspectors viewed the facility's safety video while waiting for Mr. Burkey. Mr. Burkey then conducted the inspectors to his office in the Engineering Section of the Main Office building. The inspectors presented credentials to Mr. Burkey and Mr. Szaro then explained the purpose of the RCRA Subtitle C inspection to be conducted at the facility. The inspection included an evaluation of the facility's manufacturing processes and compliance with the federally authorized Pennsylvania Code Title 25, Hazardous Waste Management System (PA Title 25) and RCRA.

All information included in this report are the results of statements made by the facility representatives, materials shown to the inspectors by the facility representatives during the inspection, information and documents provided by the facility representatives to EPA during or after the inspection, and a review of the facility's EPA and State records.

## **2.0 General Facility Information**

### **2.1 Description of Facility**

Albemarle Corporation is located at 2 Adams Avenue, Tyrone, Pennsylvania. The facility is a custom chemical manufacturer that runs batch operations of chemical processes such as hydrogenations, extractions and distillations. Photographic products, herbicides, pesticides and dyes are among the items manufactured. The Tyrone facility emphasizes flexibility in their operations. Frequently processes are developed on a pilot plant scale at the Tyrone facility and are then transferred to full scale production at other Albemarle facilities.

The Tyrone facility was established in 1975 by two entrepreneurs and went into business as Quality Chemicals, Incorporated. In 1986, the facility was purchased by First Chemical Corporation, which was part of First Mississippi Corporation of Pascagoula, Mississippi. In 1995 the name was changed to Chem First Fine Chemicals and then on July 1, 2000 the facility became part of Albemarle Corporation.

Albemarle Corporation is headquartered in Richmond, Virginia and has other manufacturing facilities in Arkansas, Louisiana, Ohio, South Carolina, Texas, England, France and Germany. There are currently about 185 employees (including contractors) at the Tyrone facility, operating it on a 3 shift basis, 7 days per week. Contractors from Shaw Construction are used for production operator and shipping and receiving positions. Maintenance is performed by contractors from DG Goodman.

The facility is located on the outskirts of Tyrone, PA in the Tyrone Industrial Park. A Site Plan is included as Attachment 1.

## **2.2 Compliance History**

The Comprehensive Compliance Monitoring and Enforcement Report is included as Attachment 2. EPA previously inspected the facility on 4/18/00 while it was doing business as Chem First Fine Chemicals and documented one violation. PADEP has inspected the facility annually since that time. No subsequent violations have been documented.

## **3.0 Permit Status**

Based on a review of the facility's manifests for 2004, 2005 and 2006, the Albemarle Corporation facility is a Large Quantity Generator (LQG) of hazardous waste. The facility is not permitted to store, treat or dispose of hazardous waste and is therefore subject to the less than 90-day generator requirements under the PA Title 25. The facility does have a NPDES discharge permit to discharge the effluent from the Waste Water Treatment area to a retention basin that leads to Bald Eagle Creek. Bald Eagle Creek is part of the Susquehanna Watershed. The facility also has a synthetic minor air permit.

The facility employs a Macro Porous Polymer Extraction (MPPE) system to remove solvents generated at the facility. Information on the MPPE system is included as Attachment 3. The facility has a permit from the local POTW for the wastewater effluent from the MPPE process.

## **4.0 Process Description**

Photographic products, pesticides, herbicides and dyes are among the primary items produced at the facility. Production is by various batch techniques. There are in excess of 30 reactors of various capacities and capabilities used in the manufacturing processes at the facility. A listing of most of the main chemical processing equipment at the Tyrone, PA facility is listed in the Albemarle Corporation publication, "A Full Tool Box", which is included as Attachment 4. Referring to the Site Map included as Attachment 1, the processing areas at the facility are designated as B-1, B-2, B-3, B-6, B-9, B-10 and B-14. Each of the reactors has ancillary tanks and equipment that are part of each reactor unit operation.

An example of a batch process procedure is included as Attachment 5. Included in the procedure are instructions for the management and procedures to be used for hazardous waste generated during the process.

Hazardous waste generated in the process areas is pumped through dedicated piping to the Hazardous Waste Storage Tanks that are located in the Waste Pad Area. There is an exception for the hazardous waste generated by the processes in process areas B-1, B-2 and B-3. The tanks in the Waste Tank Pad are constructed of carbon steel. The hazardous waste generated by the processes in B-1, B-2 and B-3 has acetic acid as a component which can not be stored in a carbon steel tank. For this purpose the facility has located a 7500 gallon, single-hole stainless steel, tanker truck on Concrete Pad #1. The truck was spotted there in August 2005 and has remained there up to the time of inspection. Shipments of the waste are made by transferring the material from the spotted tanker truck to a separate tanker truck.

Smaller liquid quantities of hazardous waste generated are collected in tote bin containers in the various process areas. The contents of these tote bins are periodically transferred to the hazardous waste storage tanks on the Waste Tank Pad.

Solid wastes such as PPE that are generated are placed in drum boxes owned by Giant Resource Recovery (GRR). These containers, when full, are transferred to Drum Storage 3 which is the Main <90-Day Hazardous Waste Storage Area at the facility.

## **5.0 Hazardous and Universal Waste Generation**

Before beginning the inspection Mr. Burkey broke down the function of the ten Hazardous Waste Storage Tanks in the Waste Pad Area. A list of those tanks is included as Attachment 6 and a site plan of the Waste Tank Pad is included as Attachment 7. The breakdown of the tanks is as follows:

Tanks TCS-8000-2 & TCS-8000-3 are used for the pre-storage of Aqueous/Flammable wastes destined for the MPPE process. In the tank designations, TCS stands for tank carbon steel, the middle number is the tank capacity in gallons and the last number is the identification number of a specific tank. The pre-storage waste then has the pH and flash point checked and adjusted in a mixing tank if necessary. From the mixing tank the material is transferred to tanks TCS-8000-1 & TCS-8000-4. The material from tanks 1 & 4 is then fed to the MPPE process where solvents such as toluene are removed. The effluent wastewater is sent to two tanks in another part of the facility and is then checked to meet the POTW discharge requirements. If ok, the material is released to the POTW. If permit requirements are not met, the material is returned to the MPPE process. Solvent vapors from the MPPE process are passed through an activated carbon bed. When changed out, the activated carbon is vacuumed out and shipped as non-hazardous waste to Calgon Carbon Corporation for regeneration. An adsorbate profile document from Calgon for this type of material is included as Attachment 8.

Organic rich material from the MPPE process goes to a separator where the organic and aqueous materials layer out. The organic layer is allowed to overflow to tank TS-100-5 while the aqueous layer is returned to the MPPE process. The organic material collected in TS-100-5 is then pumped to Hazardous Waste Tank TCS-8000-7.

Tanks TCS-8000-5, 6, 8, and 9 are used for Aqueous/Flammable wastes. Tanks TCS-8000-7 and TCS-8000-10 are used for Organic/ Flammable wastes. Dedicated lines from the various process areas to the designated tanks allow for separation of the waste streams. Instructions on the various batch procedures indicate the path of each hazardous waste generated. An example of a batch procedure is included as Attachment 4.

The tank truck spotted on Pad 1, as mentioned in the process description, is used to store the waste from the processes in Process Areas B-1, B-2 and B-3. Mr. Burkey stated that waste is transferred from this tank truck approximately twice weekly. The tank truck has been spotted at this location since August 2005. Mr. Burkey estimates it will remain at the present location until at least October 2006, at which time it is expected that the processes generating the type of hazardous waste stored here will no longer be in operation at the facility.

## **5.1 Hazardous Wastes**

- \* **Laboratory materials** – Samples and wastes generated in the Lab are collected in two satellite containers under a hood. Each night the satellite containers are emptied into a 55 gallon container inside a secondary container outside of the Lab building. This container is treated as a <90-Day Hazardous Waste Storage Area.

There is also a 5 gallon container in the Lab for the collection of mercury from items such as broken thermometers.

- \* **Process area liquid wastes** – Smaller quantities of hazardous waste generated are collected in tote bin containers in the various process areas. The contents of these tote bins are periodically transferred to the hazardous waste storage tanks on the Waste Tank Pad.
- \* **Process area solid wastes** - Solid wastes that are generated in the various process areas are placed in drum boxes, located at each individual area, owned by Giant Resource Recovery (GRR). These containers, when full, are transferred to Drum Storage 3 which is the Main <90-Day Hazardous Waste Storage Area at the facility.

## **5.2 Universal Wastes**

- \* **Used Lamps** – Mr. Burkey stated that used lamps are collected in Maintenance Area B-5.

- \* **Used Batteries** – Mr. Burkey stated that the used batteries are collected in Maintenance Area B-5. The batteries are sent to Reclaimer of Tyrone, PA.
- \* **Aerosol Cans** – Mr. Burkey stated that aerosol cans are collected in a 55 gallon container in Maintenance Area B-18.
- \* **Used Oil** – Mr. Burkey stated that used oil generated at the facility is mixed with the hazardous waste that is sent to Hazardous Waste Tanks TCS-8000-7 and TCS-8000-10 as the hazardous waste from these two storage tanks is sent to a Giant Resource Recovery facility for energy recovery.

## **6.0 Inspection Observations**

### **6.1 Maintenance Area B-5**

At the front of Warehouse B-5, the facility had used fluorescent lamps stored. The containers with the used bulbs were closed and labeled. See PHOTO 1 of the Photographic Log which is included as Attachment 9. A metal halide bulb was found in one of the containers which are sent for recycling, see PHOTOS 2 & 3. An MSDS for this type of lamp is included as Attachment 10.

The collection container for aerosol cans was observed at the rear of the warehouse by the maintenance office. The container was observed to be closed and labeled as "Aerosol Cans Only".

### **6.2 Process Area B-1 and B-2**

Hazardous waste generated in bulk in this area is transferred through chemical hoses to a pump (PHOTO 7). The pump feeds a waste pipe header (PHOTOS 5 & 6) which directs the waste to the appropriate Hazardous Waste Storage Tank in the Waste Pad Area. Many threaded fittings were observed and few, if any, markings were observed on the pump, valves and fittings. Mr. Burkey had the EPA Inspector return to this waste pipe header on the second day of the inspection. On the "A" WASTE LINE shown in PHOTO 1 Day 2 the number "136" was observed to be written with magic marker.

Floor drains were observed in the process area. Mr. Burkey stated that the floor drains go to the MPPE unit and that the drain sumps have to be released manually. That is so that if there is a spill the material can be contained and then directed elsewhere if need be.

PHOTO 8 shows the <90-Day container used for the smaller amounts of liquid hazardous waste generated in the process area. The container was observed to be closed

and labeled at the time of inspection. The log for this area was available at this location and provided the date this container was last emptied.

### **6.3 Outside Process Area B-1**

The solid hazardous waste generated in Process Area B-1 is kept in a <90-Day container that is kept in a shed (PHOTO 9) just outside the area. The container itself (PHOTO 10) was not in the shed at the time of inspection as the facility was in the process of making modifications to the shed. The container was observed to be closed, labeled and dated at the time of inspection. See PHOTO 11.

An activated carbon drum (PHOTO 4) is used in this area to control vented solvent vapors. Mr. Burkey stated that activated carbon drums are used at several areas around the facility. He further stated that, unlike the used activated carbon from the MPPE process, the used activated carbon drums are manifested out as hazardous waste.

### **6.4 Process Area B-3**

A container for the generation of small amounts of liquid hazardous waste was observed in this process area. The container was closed and labeled. A valve and some of the fittings are shown in PHOTOS 13 and 14. The only marking observed was the tag shown in PHOTO 14 that reads "Line to 8000-10 Waste Tank".

### **6.5 Macro Porous Polymer Extraction (MPPE) System**

Organics are extracted from the columns using low pressure steam. The extracted material enters a separator where organics and aqueous phases layer out. The organic layer then overflows into Tank TS-100-5 shown in PHOTOS 15 and 16. Mr. Burkey stated that the material collected in TS-100-5 is a hazardous waste that is then pumped to one of the Organic/ Flammable Hazardous Waste Storage Tanks. The hoses in PHOTO 16 then lead to the pipe shown in PHOTO 17 which has the tag that reads "TO TCS 8000-7 which is one of the hazardous waste tanks in the Waste Pad Area that contains Organic/ Flammable material. Tank TS-100-5 was not observed to be labeled as Hazardous Waste. The tank was not dated nor was a log available for it. Markings were not observed on the valves or fittings of the transfer line used to transfer the hazardous waste from TS-100-5 to TCS-8000-7.

### **6.6 Acetic acid containing Hazardous Waste Storage Tank Truck**

This tank truck was observed on Pad #1 which is the Process Area B-1 raw material storage area. The tank truck was observed to be closed and labeled as Hazardous Waste. See PHOTOS 21 and 22. The hoses shown in Day 2, PHOTOS 3 and 4, are the loading and vent lines of the tank truck. The truck is in the containment area for the raw material storage. Mr. Burkey stated that any material spilled would be contained by this area and would then flow into the Waste Pad Area containment. This



path is shown in PHOTO 23 where the Tank Truck is seen at the left and one of the tanks in the Waste Pad Area can be seen at the rear of the photo.

PHOTO 24 shows where the containment for the raw material storage area interfaces with the driveway. The driveway drains down to a storm water drain outside of the Waste Pad Area shown in PHOTO 19. PHOTO 20 shows the stenciling by this storm water drain which reads "STORM WATER DRAIN GOES TO BALD EAGLE CREEK". It appeared to the EPA Inspector that some material from the Pad #1 area would flow out to the driveway instead of down to the Waste Pad Area. Shortly thereafter, a driving rainstorm ensued. The EPA Inspector took PHOTO 28, the same area as in PHOTO 24. Storm water was observed flowing out of the Pad #1 area down the driveway to the storm drain. When the EPA Inspector returned the next day to finish the inspection, PHOTOS 2 and 3 on Day 2 were taken that show a path of material flowing out of the Pad #1 area to the driveway.

## **6.7 Waste Tank Pad Area**

The Waste Tank Pad Area had a containment wall along its entire perimeter and was observed to be in serviceable shape. A section of the containment wall is pictured in PHOTO 25. The pad contained a significant amount of storm water at the time of inspection on June 27<sup>th</sup> as torrential rains were falling on and off throughout the day, making a close inspection of the pad unfeasible. The EPA Inspector returned to the area on June 28<sup>th</sup>, the second day of the inspection, to further evaluate the condition of the pad. Significant storm water was still observed in the containment area as heavy rains had continued through the previous evening. Several areas of the pad, such as the one shown in PHOTO 6, Day 2, were observed that were in need of repair. Mr. Burkey stated that the facility had a proposal for repair of these areas that the facility had already accepted and were waiting for favorable weather in order to proceed. Mr. Burkey produced said proposal, dated 6/6/06 from Regal Industrial Corporation, later the same day. A copy of said proposal is included as Attachment 11.

Ten (10) tanks were observed in the containment area. PHOTO 27 depicts the style of labeling that was observed on each tank in the area. Accumulation start dates were not observed on the tanks but are recorded, albeit by a complex records system. The tank levels are continuously monitored in the control room. However, the software used does not permit the facility to print out the inventory. Using a combination of documents, namely, Tank & Manifest Instructions and Uniform Hazardous Waste Manifests, the facility is able to demonstrate whenever each of the tanks is emptied. The Facility then maintains a separate document, the Waste Tank Empty Documentation Form, to record on a single sheet the status of each of the ten tanks. Each date emptied includes the Manifest Document Number to crosscheck when a tank is emptied. Examples of the Waste Tank Documentation Forms and the Document Number Shipping Forms for the months of January and February 2006 are included as Attachment 12.

## **6.8 Process Area B-6**

The handling of the bulk liquid hazardous waste is similar to that in Process Area B-1. Hazardous Waste is transferred through the pumps and hoses shown in PHOTO 31 to the Hazardous Waste pipe header shown in PHOTO 30 and becomes the pipe labeled "ORGANIC WASTE" shown in PHOTO 29. No identification markings were observed on the piping in this area.

## **6.9 Process Areas B-9 and B-10**

Hazardous Waste generated in Process Area B-10 is transferred through the pump and lines shown in PHOTO 32 into the line pictured in PHOTO 33. The label on the line in PHOTO 33 reads "B10 WASTE LINE TO B9 WASTE HEADER". Close-ups were taken of sections of the piping in this area. PHOTO 34 shows a valve, flanges and threaded fittings. PHOTO 35 shows the only identification marking observed on any of the equipment in this area.

A <90-Day Hazardous Waste container was observed in this area. It was closed and labeled as Hazardous Waste. The log pictured in PHOTO 36 was attached to the container. It was typical of the logs observed on this type of container throughout the facility.

## **6.10 Drum Storage 3 (Main <90-Day Hazardous Waste Storage Area)**

Several containers used for solid hazardous waste were observed in this area. The containers were all closed. Hazardous Waste labels and dates could only be observed on the containers facing out in PHOTO 37. The containers to the rear, as shown in PHOTO 38, did not have any labels or dates that could be observed. Mr. Burkey had these containers rearranged so that when the EPA Inspector returned the next day the labels and dates on each of the containers could be observed.

Two containers of the solid hazardous wastes in the tote bins supplied by GRR were in this area. They were both observed to be closed, labeled and dated. Three 55 gallon containers were observed on a pallet. Mr. Burkey stated that they were generated during a processing incident. These containers were all observed to be closed, labeled and dated.

Another pallet was observed in that area, upon which were four 55 gallon containers that were not dated or labeled as Hazardous Waste. See PHOTO 39. Mr. Burkey explained that these were old raw materials that were undergoing waste profiling. At the time of inspection it had not yet been determined if these materials were hazardous waste.

## **6.11 Laboratory**

Mr. Burkey had Bob Turcovski, Process Manager, accompany the inspectors through the Lab area. Samples and waste generated in the Lab are placed in one of two satellite containers that are kept under a hood. Both containers were observed to be closed and labeled. See PHOTO 43. Mr. Burkey and Mr. Turcovski stated that the two satellite containers are emptied into the Laboratory <90-Day Hazardous Waste Storage container on a daily basis. A separate five gallon satellite container was observed in the supply room for mercury waste from items such as broken thermometers. This container was observed to be closed and labeled.

## **6.12 Laboratory <90-Day Hazardous Waste Storage Area**

This area is located just outside of the laboratory. It consists of a 55 gallon container that is kept inside a secondary containment unit. The container was observed to be closed but no label or date was observed on the container. See PHOTO 41. Labeling and dating was observed on the outside of the rollup panel on the secondary containment unit that holds this container. Mr. Burkey stated that the whole unit is transported to the Hazardous Waste Storage Tank area where the material is pumped out of the primary container and into one of the Hazardous Waste Storage Tanks. The unit is then returned to its regular location to be used again. The EPA Inspector observed that the top of the 55 gallon container appeared to be corroded and inquired how long the same inside container had been in the unit. Neither Mr. Burkey nor Mr. Turcovski was able to answer the question.

## **6.13 Process Area B-14**

The handling of the bulk liquid hazardous waste is similar to that in Process Area B-1. Hazardous Waste generated in different locations in the area is transferred through the pump, piping and hoses shown in PHOTO 45 to the pipe labeled "ORGANIC WASTE" that is shown in greater detail in PHOTO 44. No identification markings were observed on the piping in this area. Many valves and threaded fittings are depicted in PHOTO 45.

PHOTO 47 shows the <90-Day container used for the smaller amounts of liquid hazardous waste generated in the process area. The container was observed to be closed and labeled at the time of inspection. The log for this area was available at this location and provided the date this container was last emptied. The red label to the right of PHOTO 47 indicates that the contents of this container be pumped to Hazardous Waste Storage Tank TCS-8000-7 or TCS-8000-10, which are the two tanks where the material is shipped to GRR for energy recovery.

Process area B-14 had to be inspected at the end of the inspection tour as hazardous material was being handled in the area earlier. The material was allyl chloroformate. The MSDS is included as Attachment 13 and notes that the material

contains <0.3% phosgene. The MSDS further indicates that any residual material of this product must be incinerated at a permitted hazardous waste incinerator.

## **7.0 Records Review**

Records review initiated on June 27<sup>th</sup>, both PADEP Inspectors were present. The review was completed on June 28<sup>th</sup>, Mr. Meitrott of PADEP was again present but Mr. Union was unable to attend.

## **7.1 Manifests**

Manifests for calendar year 2006 were reviewed as part of this inspection. Based on the manifests and confirmed by the biennial reports this Albemarle Corporation facility would be categorized as a Large Quantity Generator of hazardous waste. The facility's manifests were observed to be in good order. Land Disposal Restriction forms were also checked and found to be in good order. Manifests for years prior to 2006 were not reviewed due to the volume of manifests the facility generates.

The only inconsistency observed was an assemblage of manifests that appeared to be shipped out on March 31, 2006 on a single transporter. It took four different transporters and twenty days for the shipments to reach the final TSDF. Mr. Burkey explained that the shipment consisted of an assortment of containers that were first shipped to a TSDF that only hazardous waste in bulk shipments. The shipments were thusly rerouted to a more appropriate TSDF which necessitated the additional transporters.

## **7.2 Inspection Logs**

The facility maintains a master Hazardous Waste Storage Log that appeared to encompass all of the areas at the facility where inspections are required. A copy of the Log for the time period of June 6, 2006 thru June 28, 2006 is included as Attachment 14 along with a copy of the facility's Inspection Procedure.

The Hazardous Waste Storage Logs were reviewed for calendar years 2003, 2004, 2005 and 2006. The records appeared to be complete throughout that time frame.

## **7.3 Hazardous Waste Storage Tank Assessments**

Due to the repairs observed to be needed to the Waste Tank Pad Area the EPA Inspector requested the assessments for the ten Hazardous Waste Storage Tanks located in the area. Mr. Burkey could not locate them at the time of inspection but did provide them pursuant to the inspection. The assessments appeared to be complete except for the lack of a certification by a professional engineer. Mr. Burkey followed up and provided the professional engineer certifications for eight of the tanks.

#### **7.4 Subpart BB Monitoring**

Few markings were observed (about 25%) on the piping and equipment used for the transfer of hazardous waste throughout the facility. Mr. Burkey stated that Subpart BB monitoring is performed monthly. He provided a copy of the monitoring results conducted in May 2006 by Furmanite Incorporated who is under contract to conduct the monthly monitoring. A copy of the May 2006 monitoring results is included as Attachment 15. Upon reviewing the monitoring report, it was observed that the pieces of equipment that appear to be subject to Subpart BB monitoring are listed out in detail and are each assigned an individual Tag ID number. The report identifies 148 valves and 5 pumps subject to monitoring.

Pursuant to the inspection, Mr. Burkey supplied a copy of the Furmanite procedure for identifying and flagging system components that need to be monitored to comply with the requirements of Subpart BB. The procedure, included as Attachment 16, describes a very detailed procedure for the actual tagging and for the documentation of the tagging of each component. A further letter from Furmanite, dated July 31, 2006 and included as Attachment 17, claims that components need not be physically tagged but can be identified through other means, such as P & IDs or through databases.

#### **7.5 Training**

Mr. Burkey stated that the policy at this Albemarle facility is that everyone at the facility, with the exception of office staff, receives Hazardous Waste training. The training records for 2005 were reviewed and appeared to be complete. Training records for 2006 showed that a significant amount of the employees had already completed the annual training.

#### **7.6 Job Descriptions**

Job descriptions at the facility for the positions of Lab Technician, Production Foreman, Environmental Engineer, Process Manager, Waste Coordinator, Senior Shipper/Receiver and Operator were reviewed. Reference to hazardous waste function was observed in all but the Operator job description. Mr. Burkey forwarded a revised Operator job description on July 17, 2006 which was reviewed and appeared to be identical to the job description provided at the time of inspection. No reference to hazardous waste functions was observed.

#### **7.7 Contingency**

The PPC plan at the facility was reviewed and appeared to fulfill the necessary requirements.

## 8.0 Closing

Ivan Riggle, Site Compliance Manager, joined Mr. Burkey for the closing conference with USEPA Inspector Jan Szaro and PADEP Inspector Jeff Meitrott.

### **Areas of concern raised are as follows:**

- 1) The 100 gallon tank designated as TS-100-5 used to collect the solvent from the separator that is part of the MPPE process was not marked with an accumulation start date, not labeled as Hazardous Waste and being inspected daily. During the inspection Mr. Burkey had stated the contents of TS-100-5 are regularly transferred to Hazardous Waste Storage Tank TCS-8000-7.

*Mr. Burkey then stated that the contents of TS-100-5 could be reused and need not necessarily be pumped to a hazardous waste storage tank. He further stated that the facility looks at TS-100-5 as a process tank as opposed to a hazardous waste storage tank.*

- 2) The tanker truck that has been sitting stationary at the facility since August 2005 and is being used for the storage of the acetic acid containing hazardous waste stream. Whether the tanker truck constitutes a tank or a container, due to portability issue, the photos taken during the rain storm that occurred during the course of the CEI demonstrated that there is not an effective secondary containment for this vessel.
- 3) The majority of the equipment that appears subject to Subpart BB monitoring at the facility (about 75% of approximately 150 valves and pumps) was observed not to be equipped with identifying markings.
- 4) The fifty-five gallon Hazardous Waste container outside of the Laboratory building was observed not to be labeled as Hazardous Waste or marked with an accumulation start date. The secondary container that the primary container was housed in was labeled and dated but the primary container was not.

*Mr. Burkey supplied information pursuant to the inspection that said primary container has been labeled and dated.*

- 5) Three of the seven containers (totes) observed in Drum Storage 3 (90-Day Storage Area) were placed such that Hazardous Waste labeling could not be observed.

*This was observed to be corrected during the CEI.*

- 6) The Metal Arc bulb observed in Maintenance Area B-5 was observed to be of a type that came in packaging that stated "Contains Mercury". Pursuant to the inspection Mr. Burkey provided a MSDS that states that this type of bulb passes TCLP testing.

- 7) The job description for Operator at the facility was observed to not make any reference relating to hazardous waste functions. A revised Operator job description received pursuant to the CEI was also observed to not make any reference to hazardous waste functions.

## **9.0 Attachments**

1. Site Plan for Albemarle Tyrone, PA facility
2. Comprehensive Compliance Monitoring & Enforcement Report
3. Macro Porous Polymer Extraction System brochure and additional information from Facility dated 7/17/06
4. Albemarle Publication "A Full Toolbox"
5. Batch Process Procedure Example
6. Hazardous Waste Tank List
7. Waste Tank Pad Site Plan
8. Calgon Carbon Corp Adsorbate Profile document
9. Photographic Log
10. MSDS for Sylvania metal halide lamps
11. Waste Tank Pad Area repair proposal
12. Jan & Feb '06 Waste Tank Documentation Forms & Document Number Shipping Forms
13. MSDS for Allyl Chloroformate
14. Hazardous Waste Storage Log for 6/8/06-6/28/06 & Inspection Procedure
15. May 2006 Subpart BB monitoring report
16. Furmanite Process Research & Unit Documentation Procedure
17. Furmanite correspondence dated July 31, 2006
18. Albemarle job description for Operator position